

**OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT'S  
LONG-TERM BASELINE FUNDING NEEDS AS REQUIRED BY  
FY 2003/04 BUDGET ACT SUPPLEMENTAL LANGUAGE  
ITEM 3980-001-0001**

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Office of Environmental Health Hazard Assessment

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## PREFACE

This report has been prepared by the Office of Environmental Health Hazard Assessment (OEHHA) in compliance with the provisions contained in the Supplemental Report of the 2003 Budget Act, Item 3980-001-0001. These provisions state:

*“On or before January 10, 2004, the Office of Environmental Health Hazard Assessment (OEHHA) shall provide a report to the Legislature (including budget and fiscal committees from both houses) on the long-term baseline funding requirements of the office. It is the intent of the Legislature that OEHHA be funded at a level that allows the office to adequately meet its statutory mandates and to do so as efficiently as possible. The purpose of this report shall be to determine the appropriate level of funding for the office and allocation of funding sources to support this level of funding. In particular, the report shall include the following:*

- (a) Analysis of ongoing funding requirements of the department to allow it to carry out its responsibilities under state law.*
- (b) Recommendations regarding the appropriate mix of general funds and special funds, including all eligible special fund sources (whether or not fund balances are available to support these activities), to support the office’s activities.*
- (c) Recommendations for the level of General Fund and fee support to support these activities, tying the funding source to specific mandated activities, and a justification for why these levels were selected.*
- (d) Findings regarding potential improvements in the efficiency of the department’s operations, including mechanisms to share workload with other Cal/EPA agencies and the Department of Health Services.”*

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## EXECUTIVE SUMMARY

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OEHHA is the lead state entity for the assessment of health risks posed by chemical contaminants in the environment. Much of the scientific expertise in state government for assessing such risks is concentrated in OEHHA. When the California Environmental Protection Agency (Cal/EPA) was established in 1991, OEHHA was deliberately created as a separate and distinct entity from the other five Cal/EPA boards and departments to provide adequate separation between the scientific work of “risk assessment” and the regulatory (“risk management”) activities of the other boards and departments, which must balance other considerations. (See Appendix A for more information.)

The Cal/EPA boards and departments, the Department of Health Services (DHS) and other agencies use OEHHA’s scientific assessments in developing policies and regulatory strategies to protect the health of Californians. These assessments help ensure that state regulations and policies focus on the most significant health threats, which in turn helps ensure that precious resources devoted to public health protection are expended in the most effective manner.

OEHHA’s assessments form the scientific basis for California’s drinking water standards, ambient air quality standards, the identification of toxic air contaminants, and the placement of substances on the state’s Proposition 65 list of chemicals known to cause cancer, birth defects and other reproductive harm. OEHHA also plays a key role in the registration and regulation of pesticides, provides guidance to other agencies in the assessment of urban “brownfields” and other contaminated sites, issues advisories concerning harmful contaminants in sport fish, and is engaged in several activities to better assess risks to children’s health from environmental contaminants.

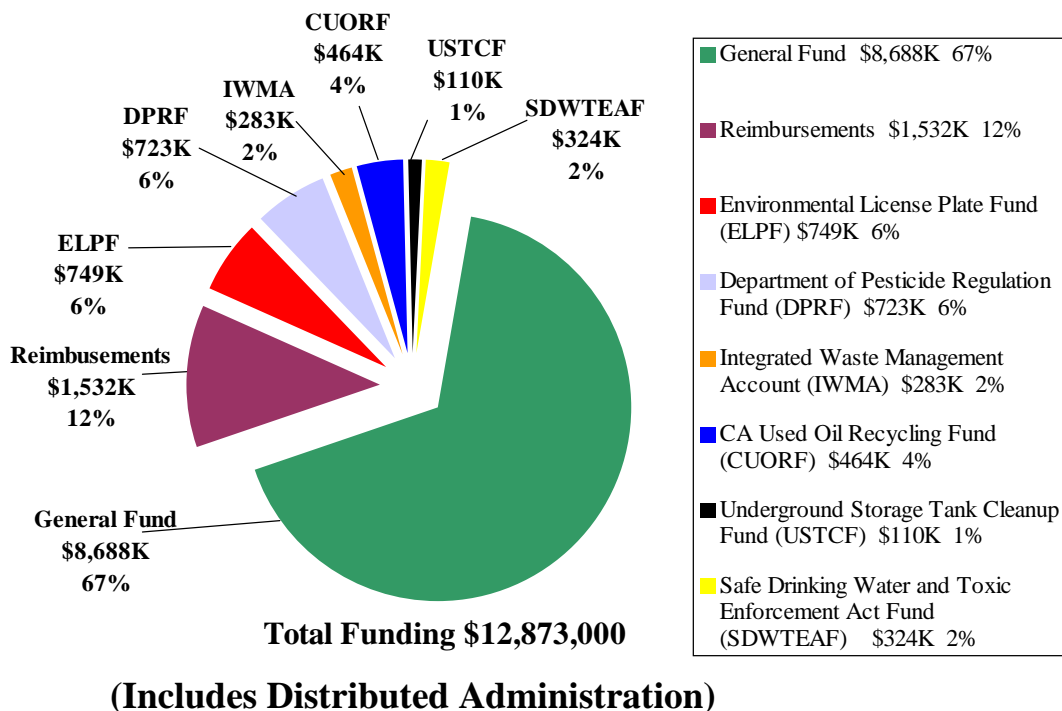
There have been dramatic shifts in OEHHA’s budget and funding sources since the office’s formation. From an initial FY 91/92 budget of \$7.9 million (102.1 PY), OEHHA’s budget “peaked” in FY 01/02 at \$18 million (174.9 PY). This growth reflected the addition of a number of mandates during that 10-year period. Without any reduction in mandates, OEHHA’s FY 03/04 budget has shrunk by 28 percent to \$12.9 million (114.9 PYs) (see Figure 1). OEHHA in the past two years has eliminated virtually all its contract support, eliminated all vacant positions, and reduced more than 20 percent of its filled positions through employee attrition pursuant to budget act reductions. In aggregate, these reductions diminish all programs that OEHHA administers and threaten the sustainability of its core risk assessment functions.

Conflicted fiscal policy has contributed to OEHHA’s fiscal instability. The General Fund was the source of 50 percent of OEHHA’s FY 91/92 budget in recognition of the broad “nexus” of the programs. As General Fund pressures increased in the 1990’s, that fund source was reduced. By FY 95/96, 58 percent of OEHHA’s revenues came from reimbursements from other government agencies. The Legislative Analyst’s Office (LAO) warned in its 1997-98 budget analysis that OEHHA’s dependence on reimbursements could potentially compromise its scientific independence. In response, the Legislature appropriated the General Fund, rather than reimbursements. In FY 01/02, General Fund represented about 80 percent of OEHHA’s support. About 67 percent of OEHHA’s current year support is from the General Fund (see Figure 1).

As the General Fund is the single largest appropriation supporting OEHHA, the “risk assessment” functions remain vulnerable to external economic circumstances although “risk management” functions in regulatory entities are somewhat insulated. Other boards and

departments within Cal/EPA are supported chiefly by special funds. Future General Fund shortfalls could delay “risk management” programs if adequate “risk assessment” support from OEHHA is reduced.

**Figure 1**  
**Office of Environmental Health Hazard Assessment**  
**FY 03-04 Baseline Budget**



#### Conclusions:

- OEHHA plays an essential role in protecting public health and the environment in California. OEHHA’s independent scientific assessments form the foundation of many of the state’s environmental standards and regulations.
- The collective expertise of OEHHA’s staff scientists is an important public asset that, like any other public asset, should be protected and managed wisely. OEHHA’s current staffing to support the department and its mandates is at critical mass, and cannot absorb further reductions. Severe staff attrition prompted by budget cuts in recent years has created critical gaps in the staff’s expertise that cannot be easily replaced.
- As General Fund support has been reduced every year since FY 02/03 OEHHA cannot fulfill all mandates in a timely or efficient manner.

## **Recommendation**

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To ensure program stability, the Legislature may consider diversifying the appropriations that support OEHHA. Several special funds have a “nexus” with the OEHHA-administered risk assessment functions. However, utilizing some of these special funds without increasing the fees which support those funds may negatively impact other Cal/EPA BDOs and other state departments’ risk management activities.

## Findings

The estimated total cost for the existing statutory mandates is:

<b>TOTAL RESOURCES TO MEET OEHHA MANDATES</b>				
	<b>TOTAL*</b>		<b>03-04 RESOURCES</b>	
	<b>\$'s (in k's)</b>	<b>Positions</b>	<b>\$'s (in k's)</b>	<b>Positions</b>
<b>PROGRAM ACTIVITIES</b>				
Toxic Air Contaminants	\$2,059	11.0	\$1,508	9.0
Fuels	\$2,248	16.0	\$1,416	9.0
Criteria Air	\$1,446	7.5	\$690	3.5
Hot Spots	\$1,046	7.0	\$757	5.0
Indoor Air	\$390	3.5	\$284	2.5
Pesticide Use & Safety	\$1,982	14.5	\$1,259	6.5
Site Assessment	\$424	2.0	\$424	2.0
Border	\$137	1.0	\$137	1.0
Children's Cancer Guidelines	\$1,077	5.0	\$180	1.0
Fish	\$1,426	8.1	\$1,029	7.1
Drinking Water	\$1,782	12.0	\$1,397	10.0
SB 32 (Land Restoration & Reuse)	\$215	2.0	\$0	0.0
Haz. ID/Technical Support/Proposition 65	\$3,437	24.0	\$2,230	16.5
Science Advisory Board	\$22	0.0	\$22	0.0
Proposition 65 Implementation	\$245	2.0	\$245	2.0
School Sites	\$988	3.8	\$515	2.8
School Art Products	\$378	3.0	\$0	0.0
EPIC	\$1,023	3.0	\$0	0.0
Program Support (Clerical, Supervisors, Cost Distributed)	\$0	6.0	\$0	6.0
<b>TOTAL PROGRAMS</b>	<b>\$20,325</b>	<b>131.4</b>	<b>\$12,093</b>	<b>83.9</b>
<b>TOTAL EXEC.</b>	<b>( \$ 1,133)</b>	<b>10.0</b>	<b>( \$ 1,133)</b>	<b>10.0</b>
<b>TOTAL EXT. AFFAIRS/LEGISLATION</b>	<b>( \$ 36)</b>	<b>0.0</b>	<b>( \$ 36)</b>	<b>0.0</b>
<b>TOTAL ADMIN.</b>	<b>( \$ 1,540)</b>	<b>16.0</b>	<b>( \$ 1,540)</b>	<b>16.0</b>
<b>TOTAL OEHHA</b>	<b>\$20,325</b>	<b>157.4</b>	<b>\$12,093</b>	<b>109.9</b>

(Summarized from Appendix C)

**Note: The total resources of \$20.3 million and 157.4 positions do not include a full complement of Distributed Administration or Program Administration. Therefore, to the extent resources are added to OEHHA's budget, there would also need to be a complementary level of administrative resources added as well.**

## Options

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Without regard to the total level of funding needed to meet existing mandates, four options may be considered to diversify support for OEHHA functions:

- 1) Direct funding from special funds that support Cal/EPA boards and departments based on their respective budgets. This option proposes that OEHHA receive 100 percent of its funding (at whatever level the Legislature determines in the annual budget act) via direct appropriations from special funds that also support the other Cal/EPA BDOs. The percentage of OEHHA support from each BDO would reflect that BDO's percentage of the total Cal/EPA budget. For example, the budgets of the State Water Resources Control Board (SWRCB) and nine regional water quality control boards comprise approximately 59 percent of Cal/EPA's total budget and, therefore, SWRCB-related fund(s) would fund 59 percent of OEHHA's budget.
- 2) Direct funding from special funds that support Cal/EPA boards and departments based on OEHHA's expenditures in program/media (i.e., air, water, land and other) areas. This option also proposes that OEHHA support would reflect the percentage of OEHHA's expenditures relating to the media (air, water, land) that falls within a regulatory jurisdiction. For example, the percentage of OEHHA revenues received from funds that support the Air Resources Board (ARB) would reflect the percentage of OEHHA revenues relating to air contaminants.
- 3) Mix of special fund appropriations from special funds that support Cal/EPA BDOs and other state departments. This option is essentially a refinement of Option 2, with OEHHA's existing special funds augmented in accordance with OEHHA's program costs by media (air, water, land).
- 4) Retain current special fund sources, and add additional special fund sources while continuing to receive some General Fund. This option proposes that OEHHA keep its current special fund sources, and replace a large portion of General Fund with additional special fund appropriations. This option is similar to Option 3, except that OEHHA would continue to receive some General Fund support for programs that do not have a "nexus" to special fund(s).

However, it should be noted that utilizing most of the special funds without increasing the associated fees would negatively impact the other Cal/EPA boards and departments through potential program reductions.



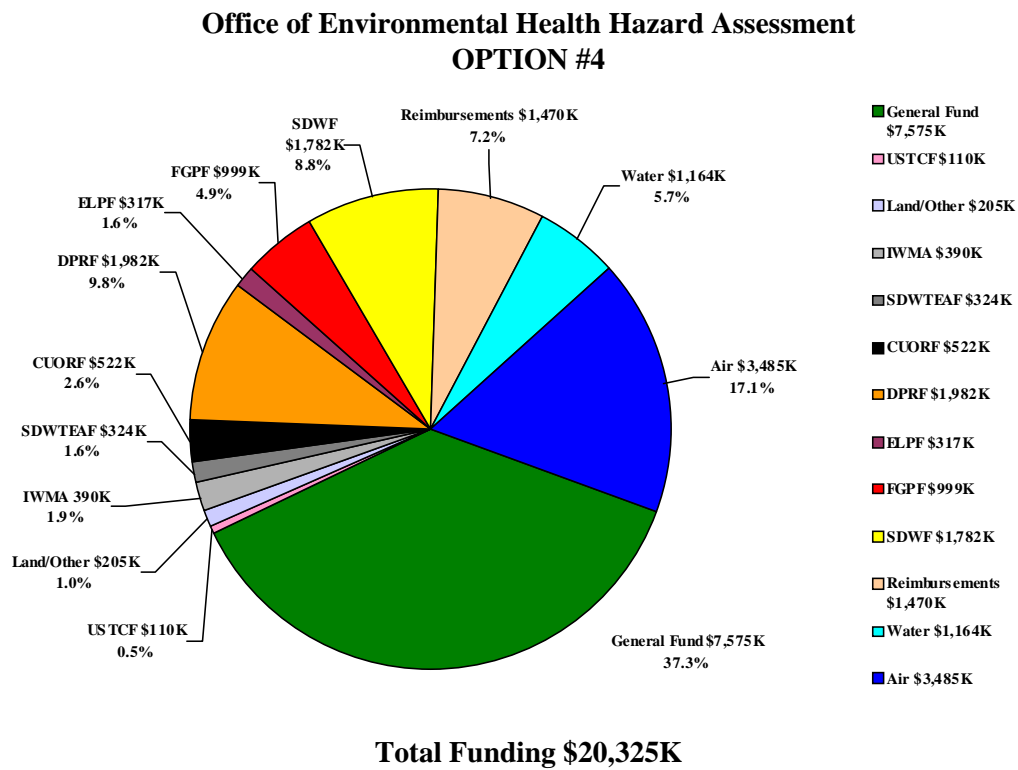
OEHHA's preferred option is Option 4 because it would diversify funding sources while maintaining core risk assessment functions. Under this option, OEHHA would directly receive special funds for specific activities relating to the objectives of those funds, and General Fund for general activities that may not be directly tied to a special fund. Below is a chart showing the recommended funding options.

**RECOMMENDED FUNDING SOURCE OPTION MIX  
TO SUPPORT OEHHA ACTIVITIES**

<b><u>PROGRAM ACTIVITIES</u></b>	<b><u>FUND NAME AND CODE*</u></b>
Toxic Air Contaminants	APCF (0115); GF (0001); MVA (0044)
Fuels	APCF (0115); USTCF (0439); UORF (0100); MVA (0044)
Criteria Air	APCF (0115); MVA (0044); GF (0001)
Hot Spots	Reimbursement; ATIAA (0434)
Indoor Air	APCF (0115); IWMA (0387)
Pesticide Use & Safety	DPRF (0106)
Site Assessment	Reimbursement; USTCF (0439); SWQCF (0679)
Border	APCF (0115); WDPF (0193); GF (0001)
Children's Health	APCF (0115); MVA (0044); GF (0001)
Fish	ELPF (0140); USTCF (0439); FGPF (0200); WDPF (0193)
Drinking Water	SDWA (0306)
SB 32 (Land Restoration & Reuse)	USTCF (0439)
Haz. ID/Technical Support	WDPF (0193); SDWTEAF (3056); GF (0001)
Science Advisory Board	WDPF (0193); GF (0001)
Prop. 65 Implementation	WDPF (0193); GF (0001)
School Sites	TSCA (0557); USTCF (0439); GF (0001)
School Art Products	APCF (0115); GF (0001)
EPIC	APCF (0115); ELPF (0140); UORF (0100); IWMA (0387); GF (0001) USTCF (0439); MVA (0044); WDPF (0193); TSCA (0557); HWCA (0014)

\*Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

Under the recommended option, OEHHA's revenue mix would consist of the following to support the \$20.3 million budget identified in the chart on page 7. See diagram below.



## INTRODUCTION

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The Supplemental Report of the 2003 Budget Act, Item 3980-001-0001, requires OEHHA to prepare a report to the Legislature (including budget and fiscal committees from both houses) on or before January 10, 2004, on the long-term baseline funding requirements of the department. The purpose of this report is to provide information so the Legislature can determine appropriate level of funding for the department and allocation of funding sources to support that level of funding. The intent stated by the Legislature in mandating this report was to ensure that OEHHA is funded at a level that allows the department to adequately meet its statutory responsibilities and to do so as efficiently as possible.

In fulfillment of this requirement, OEHHA has prepared this following report, which includes the following:

- (a) Analysis of ongoing funding requirements of the department to allow it to carry out its responsibilities under state law.
- (b) Recommendations regarding the appropriate mix of general and special funds, including all eligible special fund sources (whether or not fund balances are available to support these activities), to support the department's activities.
- (c) Recommendations for the level of General Fund and fee support to support these activities, tying the funding source to specific mandated activities, and a justification for why these levels were selected.
- (d) Findings regarding potential improvements in the efficiency of the department's operations, including mechanisms to share workload with other Cal/EPA boards and departments, and DHS.

The information presented in the report is organized in a manner that reflects the existing structure and program functions in OEHHA. Each program is described in the report, citing the statutory mandates that each of the programs implements. In practice, there is extensive interaction and cooperation among OEHHA's core programs, and it is not unusual for scientists in two or more programs to be involved in the same mandated activity. The statutory mandates have been compiled in a separate appendix to the report. The report contains an itemized listing of resource needs, with suggested options for funding sources and addresses an option for improved efficiency.

OEHHA is a unique department, both in Cal/EPA and as an independent entity in California state government. Its functions are not duplicated in other agencies and it serves an important role in environmental and public health protection for California. OEHHA's funding history is equally unique, and consideration of future mechanisms to stabilize and diversify its funding base will benefit from an understanding of OEHHA's responsibilities and the challenges (particularly in the area of staffing) that OEHHA faces in complying with its mandates.

## BACKGROUND

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OEHHA is a critical organization in the existing public health and environmental regulatory framework in California. OEHHA is the lead state entity for the assessment of health risks posed by chemical contaminants in the environment. OEHHA's assessments form the scientific basis for California's drinking water standards, ambient air quality standards, the identification of toxic air contaminants, and the placement of substances on the state's Proposition 65 list of chemicals known to cause cancer, birth defects and other reproductive harm. OEHHA also plays key roles in the registration and regulation of pesticides, provides guidance to other agencies in the assessment of urban "brownfields" and other contaminated sites, issues advisories concerning harmful contaminants in sport fish, and is engaged in several activities to better assess risks to children's health from environmental contaminants.

OEHHA's scientific analyses are a critical but little-seen component that provides the foundation of regulatory programs and decisions. Legislative debate and news-media coverage often focus on the cost of environmental regulations and their impact on the state's economy. Far less attention is paid to the scientific process of identifying and assessing public health threats. However, the results of those scientific assessments form the basis for policy decisions and regulatory strategies that protect the health of Californians. High-quality independent scientific work helps ensure that regulations and policies focus on the most significant health threats from environmental hazards, which helps ensure in turn that precious resources devoted to public health protection are expended in the most effective manner. Unstable funding for in these scientific activities reduce the state's ability to protect public health and the environment.

In making decisions to protect public health and the environment, one of the primary factors used by government is the risk of adverse health effects from an environmental hazard. In fact, almost all environmental laws use risk as the basis for setting standards and developing mitigation and intervention measures. Risk is also used to set priorities and direct resources. A general understanding of the process OEHHA uses to assess health risks is helpful in understanding OEHHA's role in the public health system and the activities it conducts to implement statutory and program mandates.

### **Risk Assessment**

Risk assessment is a rigorous scientific process that, for the purposes of protecting public health, quantifies the probability of an illness or other health effect occurring in an individual or a population from exposure to hazardous substances. Much of the scientific expertise in state government for conducting health risk assessments is concentrated in OEHHA.

In 1983, the National Academy of Sciences (NAS) established a basic process for health risk assessment as a key tool in making environmental decisions. One key objective of NAS was to separate the "science based" task of evaluating health risks from the "value based" tasks of managing risks through the regulatory process. This separation strengthens the scientific integrity of health risk assessments by protecting them from the economic and political pressures that come into play when making regulatory decisions. The operation of OEHHA as an entity

that is separate and distinct from other state regulatory boards and departments is based on this fundamental principle of separation of “risk assessment” and “risk management.”

Functionally, risk assessment is divided into four steps:

- 1) Hazard identification. Scientists identify substances in the environment that might cause harm to humans who may be exposed to them. In this step, the health effects posed by specific substances are identified. For example, scientists determine whether the substances being evaluated in the risk assessment cause cancer, birth defects, neurological damage or any other specific health effects.
- 2) Dose-response assessment. Toxicologists determine the levels of exposure to the substances identified in Step 1 that would cause particular levels of risks to human health. For most hazardous substances, there is a range of health effects that can be observed depending on the amount of exposure, or the “dose.” This step relies on scientific data collected from laboratory animal experiments and/or studies of human volunteers or workers who had been exposed to the substances in question. These first two steps are the core of risk assessment.
- 3) Exposure assessment. Risk assessors quantify the level of human exposure to the substances identified and evaluated in steps one and two. Ordinarily, exposure data is obtained from air, water and/or soil sampling compiled by environmental agencies. Mathematical models are then used to extrapolate human exposure to the substances from measured levels in the environment.
- 4) Risk characterization. Scientists estimate the human health impacts from exposure to the substances in question. Depending on the substances, this could involve an estimation of the risk of developing cancer from an environmental exposure to the substances. It could also involve an estimate of non-cancer health effects, such as birth defects. In this step, the risk assessor discusses the level of confidence in the analysis and describes areas of uncertainty in the risk calculation and the additional data that would be needed to reduce the uncertainty.

It is common for regulatory (“risk management”) agencies to be involved in certain stages of risk assessment. For example, regulatory agencies such as the ARB and the Department of Toxic Substances Control (DTSC) typically collect environmental monitoring data to be used in the exposure assessment (Step 3). While OEHHA plays a major role in all four stages of a risk assessment, OEHHA’s key activity is conducting steps one and two. OEHHA is specifically set up to perform this highly specialized assessment, which requires rigorous scientific analyses that are outside the scope of the day-to-day activities normally associated with California’s environmental regulatory agencies.

While OEHHA's hazard identifications and dose-response assessments are highly technical and are rarely read outside of scientific circles, they form the scientific foundation of many of California's environmental regulatory and public health standards. For this reason, OEHHA is critical to the state's environmental regulatory system. So that state regulatory programs can achieve their goal of reducing environmental contaminants to levels that are protective of human health, OEHHA must provide thorough, timely scientific assessments.

## **OEHHA's History and Role in Cal/EPA**

OEHHA provides scientific expertise and public health oversight to the other departments and boards in Cal/EPA, as well as other state and local government agencies. Overall, OEHHA's primary mission is "to protect and enhance public health and the environment by scientific evaluation of risks posed by hazardous substances." The smallest of the six Cal/EPA entities, OEHHA is the only organization in Cal/EPA that has no enforcement authority, and its regulatory powers are limited.

OEHHA was formed in 1991 as part of a larger reorganization of the state's environmental programs that established Cal/EPA. However, its roots extend back several decades to the early years of California's environmental-protection efforts. For example, OEHHA's air toxicology programs trace their origins to the formation of an air epidemiology unit in the Department of Public Health in the 1950s. OEHHA's pesticide programs are the descendants of initiatives that began following the publication of Rachel Carson's "The Silent Spring" in the 1960s, and the controversy over urban aerial spraying to eliminate a Medfly infestation in the 1980s. Hazardous waste assessment activities in OEHHA owe their existence to a decision by Governor Jerry Brown in the early 1980s to form an environmental toxics unit in DHS in response to growing concern at the time over hazardous waste contamination. And the approval of Proposition 65 by California voters in 1986 created a need for toxicologists in state government to administer the list of chemicals known to the state to cause cancer, birth defects and other reproductive harm – a task initially assigned to the Health and Welfare Agency and then transferred to OEHHA upon its establishment.

To improve the coordination of California's environmental programs, the Governor's Reorganization Plan No. 1 of 1991 (GRP-1), effective July 17, 1991, formed OEHHA as the independent "scientific arm" of Cal/EPA with these four core toxicology programs – air, pesticides, hazardous waste and Proposition 65 – that had previously been housed in DHS. A summary of the reorganization plan is contained in Appendix A.

According to the GRP-1 Summary, OEHHA was created to "provide information to environmental regulators and the public about the adverse health effects that result from environmental exposures to noninfectious agents. The proposed organizational placement of the Office, to become a freestanding entity parallel to the risk management programs, represents a significant elevation from its current division status. The proposed structure of this Office will provide functional and organizational separation of risk assessment from risk management, while providing the Agency with the tools needed to achieve its mission of environmental protection" (see Appendix A).

GRP-1 transferred four core programs and associated staffing from DHS to OEHHA, and established OEHHA as the lead agency in implementing Proposition 65.

GRP-1 established OEHHA's general functions as follows:

- Evaluate the health risks of chemicals in the environment. To this end, OEHHA provides information to environmental regulators and the public about the health effects that result from environmental exposures to noninfectious agents. Emphasis is placed on the synergistic and cumulative effects of total exposure from all pollution sources.
- Identify, quantify, and recommend health-based standards for chemicals in the environment. Specific OEHHA activities focus on chemicals in air, water, food, solid and hazardous waste, fish, sediment, and certain consumer products, as well as chemicals subject to Proposition 65.
- Provide technical and scientific support, consultation, and training to state regulators, local government agencies, and the public.
- Develop scientific policies and guidelines for risk assessment procedures.
- Provide oversight of regulatory activities and guidance on scientific aspects of environmental protection.

To maintain the integrity of the risk assessment process in California, the GRP-1 Summary also says, "The functional and conceptual separation of risk assessment and risk management will be bolstered by the establishment of the OEHHA as a free-standing office, separated organizationally from the other regulatory units. At the same time, the risk assessment function will be housed within Cal-EPA, thereby enabling the Agency to set timing and resource priorities as necessary to achieve its environmental protection mission."

A fifth core program – drinking water – joined the air, pesticides, hazardous waste and Proposition 65 programs at OEHHA in 1996, with the enactment of legislation requiring OEHHA to perform health risk assessments of drinking water contaminants that form the scientific basis for the state's drinking water standards.

In addition to these five core programs, OEHHA has key responsibilities in two "cross-media" programs that may involve the evaluation of contaminants that move back and forth between (or are simultaneously present in) air, water and land. In evaluating its baseline funding needs, OEHHA considers these cross-media functions, along with the core programs, as its primary responsibilities necessary to support Cal/EPA and its boards and departments.

These two cross-media programs are:

Children's Health. In 1999, the Legislature enacted Senate Bill 25 (Escutia, Chapter 731, Statutes of 1999, Health and Safety Code Section 39669.5 et seq.), also known as the Children's Environmental Health Protection Act, which directs OEHHA and ARB to evaluate the state's ambient air quality standards and air toxics regulations to determine whether they adequately protect children and infants. This important work is now underway and will lead to the revision of any air quality standards and toxics measures deemed inadequate to protect children. The state's air-quality standards for particulate matter were revised in 2002 as a result of this

measure. Similarly, as part of a Cal/EPA initiative that was codified by Assembly Bill 2872 (Shelley, Chapter 144, Statutes of 2000), OEHHA compiled a list of chemicals of concern to children's health at existing and proposed school sites, and is developing new risk assessment guidelines to be used for the evaluation of school sites. OEHHA is also developing new guidelines for the assessment of children's cancer risks, as mandated by the bill.

Environmental Indicators. OEHHA is the lead agency in Cal/EPA's Environmental Protection Indicators for California (EPIC) project, a collaborative effort of Cal/EPA, the Resources Agency and DHS. In 2000, Cal/EPA designated OEHHA as the lead entity for this effort to identify new kinds of measurements of environmental conditions, or "indicators," that will better enable scientists and regulators to determine the true health of California's environment and assess the effectiveness of the state's environmental programs. Cal/EPA will also use data provided by the indicators in making policy and budgetary decisions. The first set of 84 indicators was completed in 2002 and is available at OEHHA's Web site. In 2003, the Legislature enacted Assembly Bill 1360 (Steinberg, Chapter 664, Statutes of 2003), which requires OEHHA to continue to develop and maintain the indicators system to the extent funding is appropriated by the Legislature. No funding was appropriated for EPIC activities for the current fiscal year.



## **Profile of OEHHA's Staff**

By far, the largest proportion of departmental resources is allocated to the scientific staff of OEHHA. (In fact, Health and Safety Code Section 359002 stipulates that the director of OEHHA “shall have broad-based scientific expertise as evidenced by a doctoral degree and work experience in a biological or medical science.”) Many OEHHA scientists are educated and trained in the medical sciences, including toxicology, medicine, epidemiology, biostatistics, chemistry, biology, and other closely related fields. OEHHA also employs staff who are educated in the environmental sciences. Some examples of OEHHA scientists' areas of specialty are public and occupational health, food chemistry, reproductive and developmental toxicology, cancer research, pesticide toxicology, environmental toxicology, modeling and other statistical applications, pediatrics, and clinical and community-based research.

While the concentration and level of available scientific expertise is clearly advantageous in meeting the responsibilities of the department, this also creates challenges. OEHHA often only has one expert in a particular area of public health science. Staff reductions in the past two years have resulted in losses in critical scientific expertise in areas such as epidemiology, childhood asthma, and childhood cancer. This requires training of other staff, which may take several years. This creates departmental inefficiencies that can slow the completion of mandated activities. OEHHA's staffing is presently at “critical mass,” making it even more difficult to train existing employees, which further hampers the completion of mandated activities. Another challenge is the time needed to recruit and hire new staff is much greater for highly specialized scientists than for more general civil-service classifications. OEHHA must compete with other employers for a relatively small pool of candidates. Once hired, the level of training for new staff in the sciences is complicated and intensive, requiring months or even years in some cases for scientific staff to develop the level of independence necessary to assume a lead role in completing projects.

## FUNDING HISTORY

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OEHHA's overall budget increased from \$7.9 million (102.1 PY) in its initial year of operations in FY 91/92 to \$13 million in FY 95/96. The budget later "peaked" in FY 01/02 at \$18 million (174.9 PYs) and, following two consecutive years of major budget cuts, is currently at \$12.9 million (114.9 PYs) in FY 03/04. The charts on the following page trace the history of OEHHA's budget and staffing.

The growth in OEHHA's budget leading up to FY 01/02 was driven by new legislative mandates (i.e. children's health and Public Health Goals). The budget decreased by 28 percent during the following two years despite the fact that these mandates have remained in effect. OEHHA eliminated virtually all its contract support, eliminated all vacant positions, and reduced more than 20 percent of its filled positions through employee attrition to fulfill the budget act control sections reductions.

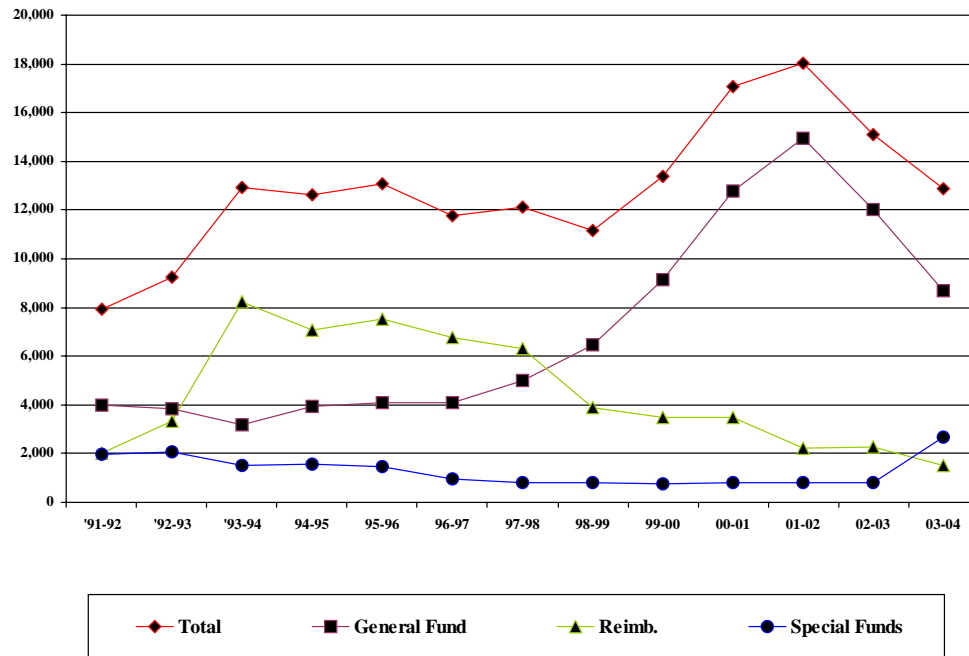
A key objective for OEHHA in seeking fiscal stability is to align its budget more closely with the funding sources of the entities it supports. The General Fund was the source of 50 percent of OEHHA's initial FY 91/92 budget, with special funds and reimbursements contributing 25 percent each. By FY 95/96, 58 percent came from reimbursements, 31 percent from the General Fund and 11 percent from special funds. This funding arrangement led to concerns. The LAO in its report on the 1997-98 budget warned that OEHHA's dependence on reimbursements potentially could compromise its scientific independence. A 2000 report commissioned by Cal/EPA to evaluate its operations also recommended against reimbursements to fund OEHHA's budget. In response, the Legislature appropriated General Fund rather than reimbursements. By FY 01/02, the General Fund provided about 80 percent of OEHHA's support.

OEHHA is now working to stabilize and diversify its funding mix. In FY 03/04, OEHHA's \$12.9 million budget consists of 67 percent General Fund, 22 percent Special Funds, and 11 percent reimbursements. For the first time this year, OEHHA is receiving funds from the pesticide mill assessment and Proposition 65 penalties. However, OEHHA is still substantially affected by General Fund circumstances and is continuing its efforts to identify other special funds to finance its activities.

Attached are two graphs, which depict OEHHA's funding by fund category over its 13-year history, and growth and decline in positions.

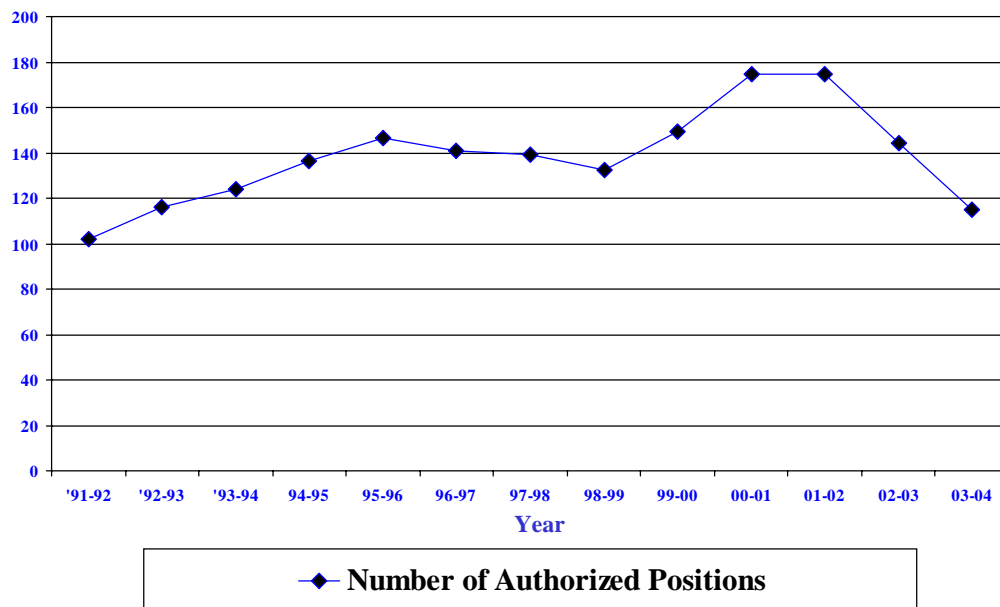
## OEHHA Budget History – 13 Years

(In Thousands)



## Office of Environmental Health Hazard Assessment Number of Positions – 13 Year History

Positions



## **MANDATED RESPONSIBILITIES OF OEHHA'S CORE SCIENTIFIC PROGRAMS**

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In preparing program descriptions for this report, citations in the legislative code or other sources of governing language (such as GRP-1, and administrative and executive orders) have been included. However, specific language is not provided except in limited cases when quotes are excerpted from these sources. The reader should refer to the full text of the relevant codes, which have been compiled in Appendix B.

### **Core Scientific Programs**

#### **Air Toxicology and Epidemiology Section (ATES)**

In general, ATES provides health effects guidance to ARB, air pollution control districts, local health officers and environmental health officers regarding health impacts of air pollutants. OEHHA responds to requests for information on the health effects of chemicals found in the air from both mobile and stationary sources, including chemicals that are already under review, new chemicals planned as replacements for compounds in use in industrial applications, or natural substances such as asbestos that can become airborne during activities that disturb asbestos-containing soils. In addition, OEHHA assists districts in providing risk communication, conducts epidemiological studies on air pollutants, develops health effects information on traffic-related pollutants, and provides emergency support in the event of fires and other disasters that release large quantities of air pollutants.

Children's Health. The Children's Environmental Health Protection Act (Health and Safety Code Section 39606) requires OEHHA to explicitly consider infants and children in making recommendations for the state's ambient air quality standards. OEHHA, in conjunction with ARB, conducted a prioritization of the criteria air pollutants focusing on whether the existing standards were adequate to protect infants and children. The statute requires OEHHA, in conjunction with ARB, to revisit any inadequate standards and provide appropriate health-based recommendations to ARB. OEHHA, in conjunction with ARB, is currently working on recommendations to revise the ozone standard. OEHHA previously worked with ARB to revise the particulate matter and sulfate standards. All of these standards as well as those for NO<sub>x</sub> and CO are necessary to protect the public including infants and children from emissions from automobiles and trucks as well as stationary sources.

The Children's Environmental Health Protection Act also requires OEHHA to develop a list of Toxic Air Contaminants (TAC) that differentially impact children. ARB is required to look at the list developed by OEHHA and revisit any airborne toxic control measures (ATCM) or develop new ATCMs for those chemicals on the list to ensure adequate protection of infants and children. OEHHA has developed the nation's first list of five TACs that disproportionately impact children, and will be updating that list in future years. And finally, the Act requires OEHHA to annually evaluate 15 TACs per year to develop cancer potency factors and reference exposure levels that adequately protect infants and children.

Because these children's health activities are interwoven with OEHHA's more general activities regarding ambient air quality standards and TACs, OEHHA does not have a separate budget category for activities specific to children's health. Instead, OEHHA includes the cost of these activities under the budget entries for TACs and criteria air pollutants.

**Statutes:** Health and Safety Code Sections 39606 and 39669.5.

**Administration Goals:** Focus on children's health. Cut air pollution statewide by 50 percent.

Toxic Air Contaminants. OEHHA is responsible for conducting health risk assessments of non-pesticide chemical contaminants found in air, including those identified as TACs or candidate toxic air contaminants. Sources of toxic air contaminants include tailpipe emissions from motor vehicles and stationary industrial sources. This work is conducted under Health and Safety Code Section 39660, which requires OEHHA to develop the health effects assessment for use by ARB in considering chemicals as TACs. ARB also uses the OEHHA health effects assessments when developing ATCMs designed to reduce emissions and associated health risks.

**Statute:** Health and Safety Code Section 39660 et seq.

**Administration Goals:** Cut air pollution statewide by up to 50 percent. Protect California's air quality standards for industrial facilities and motor vehicles.

Air Toxics Hot Spots Information and Assessment Act. OEHHA is also responsible for implementing portions of the Air Toxics Hot Spots Information and Assessment Act. The Act is designed to provide ARB and the air pollution control districts with information on what chemicals are emitted into the air, the quantity of those chemicals and health impacts. The Act results in a number of facilities conducting emissions inventories and preparing risk assessments. Facilities that create significant health risks are then required to develop and implement risk-reduction plans. Under this mandate, OEHHA has developed and updated risk assessment guidance (and has identified safe exposure levels for various contaminants) for use in these site-specific risk assessments. OEHHA also reviews risk assessments conducted by facilities, and provides written comments to the districts on the accuracy and completeness of the risk assessments.

**Statute:** Health and Safety Code Section 44300 et seq.

**Administration Goal:** Cut air pollution statewide by up to 50 percent. Protect California's air quality standards for industrial facilities.

Criteria Air Pollutants. OEHHA makes health-based recommendations to ARB for Ambient Air Quality Standards. These health-based recommendations are based on an exhaustive evaluation of the epidemiological, medical, and toxicological literature pertaining to the criteria air pollutants (ozone, particulate matter, nitrogen dioxide, sulfur dioxide, carbon monoxide, hydrogen sulfide). ARB considers OEHHA's health-based recommendations in setting the state's Ambient Air Quality standards.

OEHHA also conducts epidemiological investigations of the health effects of criteria air pollutants, such as ozone, oxides of nitrogen, and sulfur dioxide. Such investigations include the health impacts on the more susceptible or sensitive subpopulations such as children, individuals with certain pre-existing health conditions, and the elderly. For example, OEHHA recently conducted an evaluation of the impacts of traffic-related pollutants on children at schools and in

their neighborhoods. This analysis helped form the scientific basis for Senate Bill 352 (Escutia, Chapter 668, Statutes of 2003), which limits school site acquisitions near major roads.

**Statutes:** Health and Safety Code Sections 425 and 39606.

**Administration Goals:** Cut air pollution statewide by up to 50 percent. Expedite clean fuel transportation. Protect California's air quality standards for industrial facilities and motor vehicles.

Indoor Air. Evaluating indoor air quality is also a program function for OEHHA, in which staff scientists evaluate the health effects of chemicals commonly found in indoor air, especially related to recycled products. OEHHA participates in a number of interagency activities designed to evaluate indoor air quality health issues (particularly regarding the use of recycled materials), and to move California toward safer indoor air quality. OEHHA participates in a number of statewide indoor air quality workgroups, including the California Indoor Air Quality Working Group (CIAQWG), and the California Sustainable Building Working Group. The CIAQWG focuses entirely on indoor environmental quality and is administered by DHS. The California Sustainable Building Working Group covers broad areas. OEHHA participates on several subcommittees, including the Portable Classroom Working Group and a work group on environmentally preferable products formed following passage of Assembly Bill 498 (Chan, Chapter 575, Statutes of 2002).

**Statutes:** Public Contracts Code Section 12400 et seq.

**Administration Goal:** Focus on children's health. Save energy through green buildings.

### **Integrated Risk Assessment Section (IRAS)**

IRAS performs a variety of functions that are largely aimed at evaluating risks from "cross-media" contamination, i.e. contaminants that are present in more than one environmental media (air, water, and soil). When OEHHA was created, the primary function of IRAS (previously named the Hazardous Waste Toxicology Section) was to review health risk assessments prepared as part of the remediation process for cleaning up hazardous waste sites in California. In this role, IRAS assisted DTSC on the scientific aspects associated with site clean up. Recently, as DTSC became more self-reliant in this area, IRAS shifted its focus to assist other Cal/EPA boards and departments in similar activities. IRAS also has assumed responsibility for various cross-media programs.

Brownfields and Other Waste Sites. OEHHA currently has agreements with the SWRCB and the Integrated Waste Management Board (IWMB) to provide the regional water quality control boards and the waste board with assistance in evaluating site-specific health risk assessments. OEHHA provides this assistance under its general risk-assessment authority contained in Health and Safety Code Section 59017.

To comply with Senate Bill 32 (Escutia, Chapter 764, Statutes 2001), Cal/EPA has directed OEHHA to initiate a scientific peer review of the risk-based screening levels (RBSL) for chemical contaminants in soil published by the San Francisco Regional Water Quality Control Board. This statute also requires the development of additional RBSLs, which are screening levels that facilitate the cleanup and reuse of urban "brownfield" sites by assisting local developers in assessing possible clean-up costs.

**Statutes:** Health and Safety Code Sections 57008 et seq. and 59017.

**Administration Goals:** Protect California's rivers, bays, and coastline. Protect drinking water. Restore our urban environments. Address brownfield sites.

School site evaluation. OEHHA is required to publish guidance for use by DTSC and other state and local agencies in assessing exposures and health risks to hazardous substances at existing and proposed school sites. The guidance must explicitly address children-specific exposures and sensitivities. Furthermore, OEHHA is required under statute to identify those chemical contaminants that are commonly found at school sites, prioritize them according to degree of concern for child safety, and develop numerical health-based guidance values for all identified contaminants of concern.

**Statutes:** Health and Safety Code Section 901(f)(1).

**Administration Goals:** Focus on children's health. Restore our urban environments.

Fuels. California consumes at least 37 million gallons of fuel each day. ARB is required to oversee the development of a multimedia evaluation of a new fuel specification and consult with other Cal/EPA BDOs before it can create regulations allowing its use in California. Under this scenario, OEHHA is developing the guidance for the evaluation of fuel components and proposed substitutes, to assist ARB in the area of risk assessment. Currently, OEHHA has been reviewing data submissions to ARB on specific fuel additives. This guidance developed for alternative fuels evaluation might be crafted in the future as a first step in a process to assess alternatives for hazardous products as part of an overall pollution prevention approach adopted by Cal/EPA.

In addition, OEHHA has received funding in the current fiscal year from IWMB to investigate the potential health impacts from use of used motor oil as bunker fuel oil. The assessment will be done in a similar manner proposed for the health assessment for alternative fuel additives.

**Statute:** Health and Safety Code Section 43830.8.

**Administration Goal:** Expedite clean fuel transportation. Cut air pollution statewide by up to 50 percent.

Art Hazards. State law prohibits California school districts from purchasing arts and crafts products containing toxic or carcinogenic substances for use in grades kindergarten through six. The law also restricts the purchase of such products in grades 7 to 12, allowing their use only if they bear a label informing the user of the presence of hazardous ingredients, the potential health effects, and instructions for safe use for the art or craft products. OEHHA is required to develop a list of art or craft materials that cannot be used in kindergarten through sixth grade, and a list of

materials which, while not currently sold or manufactured, may be reasonably suspected to still exist at some schools. OEHHA is responsible for periodically updating the lists as it deems appropriate.

**Statutes:** Education Code Section 32066 et seq.

**Administration Goal:** Focus on children's health.

Cal/EPA Border Coordinator Project. OEHHA assists the Cal/EPA Border Coordinator in educating members of the general population along the border on ways to reduce exposures to toxic chemicals through the development of an educational and outreach program. Providing risk assessment and toxicological assistance to local government and the public is a core activity of OEHHA, and OEHHA has been active in this area since the early 1990s as part of Cal/EPA's efforts along the border. OEHHA provides risk assessment training and advice to professionals, officials, community leaders, and others along the border. This training assists local officials in identifying and prioritizing sites with significant pollution.

**Administration Goal:** Protect California's rivers, bays, and coastline. Protect drinking water. Cut air pollution statewide by up to 50 percent.

Environmental Protection Indicators for California (EPIC). The EPIC project is a collaborative effort involving Cal/EPA and its boards and departments, the Resources Agency and DHS. EPIC develops and maintains "environmental indicators" (measurements of environmental conditions) to provide an improved understanding of the health of California's environment and to aid in policy and budgetary planning. In April 2002, OEHHA, in its role as the lead agency for EPIC, produced a report that established a process and criteria for indicator selection and an initial set of 84 environmental indicators. Assembly Bill 1360 (Steinberg, Chapter 664, Statutes 2003), mandates this lead role for OEHHA. No funding was allocated to EPIC during the current fiscal year. Restoration of EPIC funding in the future will enable Cal/EPA to better evaluate the effectiveness of its environmental programs and to improve its policy and budgetary decision-making.

**Statute:** Public Resources Code Sections 71080-71082.

**Administration Goal:** Cut air pollution statewide by up to 50 percent. Protect California's rivers, bays, and coastline. Protect and restore California's parks and open spaces. Restore our urban environments.

### **Pesticide and Environmental Toxicology Section (PETS)**

PETS is responsible for fulfilling mandated responsibilities in three major areas: drinking water, sport fish, and pesticide use and safety. Inherent to these mandated responsibilities is the need to provide technical support and documentation to other Cal/EPA BDOs, other state agencies such as the DFG and DHS, and local and federal agencies.

Pesticide Use and Safety. OEHHA has three major functions in the area of pesticide use and safety evaluation: 1) human illness investigation, 2) toxicology and risk assessment, and 3) evaluation of pesticide worker safety.



- 1) OEHHA investigates and evaluates pesticide illness episodes in areas where pesticide applications and offsite drift have resulted in illness complaints and hospitalizations. As part of its responsibilities, OEHHA designs the pesticide illness reporting form that physicians are required by law to complete if they suspect a pesticide-related illness. In addition, OEHHA physicians provide technical support and training for physicians and health professionals in the recognition and management of pesticide poisoning.
- 2) OEHHA conducts independent reviews of pesticide toxicity data, assesses the health impacts of pesticide use, prepares findings on the health effects of pesticide toxic air contaminants, and conducts peer reviews of risk assessments prepared by the Department of Pesticide Regulation (DPR). OEHHA may provide advice and recommendations to DPR concerning human health risks posed by pesticides that are under evaluation. DPR is required to seek OEHHA's concurrence before granting approval for data waivers. DPR, in consultation with OEHHA, may develop regulations relating to modifications of mandatory health effect studies.

As part of the registration process for pesticide active ingredients, OEHHA reviews petitions submitted by pesticide manufacturers to waive mandatory health effects studies. (For some pesticides, the submission of these test results is cost-prohibitive.)

- 3) OEHHA and DPR work jointly to develop regulations and worker protection standards. This includes concurrent review of experimental designs to measure agricultural worker exposure to pesticides. The functions and activities listed above are integral to the development of worker health standards and regulations. OEHHA also advises medical supervisors involved in implementing California's program of biomonitoring (blood screening) of pesticide mixer/loader/applicators for exposure to pesticides.
- 4) DPR, in cooperation with OEHHA, is required to assess dietary risks associated with the consumption of produce and processed foods treated with pesticides. In order to fulfill this mandate, data on acute effects and the mandatory (chronic) health effects studies must be reviewed, appropriate dietary consumption estimated, and relevant residue data based on monitoring and field experimental and food technology information be considered to quantify consumer risk.

**Statutes:** Health and Safety Code Sections 105200 et seq. and section 59004, Food and Agricultural Code Sections 11454.1, 12980 et seq., 13126, 13129, 13130.3, 13131.2(b), 13134, 14022 and 14023.

**Administration Goals:** Cut air pollution statewide by up to 50 percent. Protect drinking water.

Drinking Water Evaluation. OEHHA evaluates and quantifies human health risks from chemical contaminants in drinking water; many drinking water contaminants are associated with both cancer and noncancer health effects. These activities include developing health advisories, action levels, and public health goals (PHG) for chemical substances in drinking water, as well as providing toxicological assistance for chemical monitoring activities for the drinking water supply. OEHHA is required to develop PHGs for contaminants in California's publicly supplied drinking water. A PHG is the level of a chemical contaminant in drinking water that does not pose a significant risk to health. PHGs are not regulatory standards; however, state law requires DHS to set drinking water standards for chemical contaminants as close to the corresponding

PHG as is economically and technically feasible. In addition, newly enacted legislation (Assembly Bill 1747, Committee on Budget, Chapter 240, Statutes of 2003) requires OEHHA to provide consultation to DHS in developing health-based criteria for evaluating grant applications and prioritizing water quality management projects to be funded by Proposition 50 bond monies.

**Statute:** Health and Safety Code Section 116365, Water Code Section 7932 and 79534.

**Administration Goal:** Protect drinking water.

Fish and Water Quality. OEHHA has the following responsibilities in the area of fish, wildlife and water quality:

- 1) Under state law, OEHHA evaluates chemical contaminants in fish and wildlife, and develops fish and wildlife consumption health advisories. Fish consumption advisories are published in the California Sport Fish Regulations and in OEHHA's California Sport Fish Consumption Advisories booklet. Consumption advisories are intended to provide anglers, hunters and their families with guidance concerning the safe consumption of fish and wildlife that may contain elevated levels of methylmercury and other toxic chemicals. These fish advisories also inform SWRCB's water quality assessments and help determine impaired water bodies. OEHHA assists SWRCB in developing a comprehensive monitoring and assessment plan for sport fish along the California coast. In addition, OEHHA can recommend that DFG close commercial fishing areas due to contaminants in the fish. OEHHA participates in the Bay Protection and Toxic Hot Spots Program specifically to evaluate the public health impacts of chemical contaminants from fish and shellfish consumption. OEHHA's risk assessments have been used to develop a sediment quality strategy, identify and characterize "hot spot" areas of elevated contamination, and develop a water quality cleanup plan for enclosed bays and estuaries.
- 2) OEHHA participates with DPR and SWRCB in hearings to review the evidence of groundwater pollution by a pesticide and to make health-based recommendations for remediation. In this capacity, OEHHA staff review the current status of the pesticide well monitoring database managed by DPR, requesting supplemental information when necessary, and performing analyses when exposures might be of concern for the general public or susceptible populations.

**Statutes:** Water Code Sections 13177.5, 13985 et seq. and sections 13392-13339.5, Food and Agricultural Code Sections 13134, 13141 et seq., and Fish and Game Code Section 7715.

**Administration Goal:** Protect California's rivers, bays, and coastline. Protect the integrity of our coast.

### **Reproductive and Cancer Hazard Assessment Section (RCHAS)**

RCHAS provides scientific support for Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), and guidance for identifying chemicals that cause cancer, birth defects, and ecological damage. RCHAS also assists other OEHHA programs in evaluating chemicals, which promotes efficiency and consistency in addressing some of the most onerous and complex toxicants facing the department and state. RCHAS also is developing guidelines for children's cancer risk assessments.

Technical Support for Proposition 65. Proposition 65 requires the Governor to publish, and update at least annually, a list of chemicals known to the State to cause cancer or reproductive toxicity. Chemicals that appear on the list become subject to a warning requirement and a prohibition against discharges into sources of drinking water. OEHHA has been the lead agency for implementation of Proposition 65 since its establishment in 1991. As its primary function, RCHAS provides scientific support in the implementation of Proposition 65 by accomplishing the following:

- 1) Maintaining the list of chemicals known to cause cancer or reproductive toxicity (currently 483 carcinogens and 269 reproductive toxicants) through identification and evaluation of data for consideration by the State's qualified experts on chemicals being considered for listing or removal from the list.
- 2) Identifying and evaluating chemicals for addition to the Proposition 65 list, and reviewing and responding to comments received during public comment periods.
- 3) Developing "safe harbor" levels for listed chemicals through quantitative dose-response assessment (currently there are 258 adopted and 11 proposed safe harbor numbers), which provide businesses, public-interest groups and law enforcement with guidance as to when businesses must provide warnings concerning exposure to Proposition 65 chemicals.
- 4) Prioritizing and compiling scientific information on chemicals under consideration for listing by either of two independent Proposition 65 scientific panels.
- 5) Providing scientific and technical support to the Attorney General's Office in enforcement actions.
- 6) Developing safe use determinations for listed chemicals, and interpretive guidelines for Proposition 65.

**Statute:** Health and Safety Code Section 25249.5 et seq.

**Administration Goal:** Protect drinking water. Protect California's air quality standards for industrial facilities.

Children's Health. OEHHA is responsible for developing children's cancer guidelines, and updating these guidelines as needed. Under this mandate, OEHHA is developing cancer risk assessment guidance and methodology that explicitly addresses cancer risk due to carcinogen exposures to the fetus, infants and children.

**Statute:** Health and Safety Code Section 901.

**Administration Goal:** Focus on children's health.

## RECOMMENDATIONS FOR FUNDING SUPPORT

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OEHHA's primary fiscal objectives at the present time are:

- Obtain sufficient funding to allow OEHHA to efficiently and effectively comply with its mandates. To fully comply with its statutory mandates, OEHHA requires total annual funding of \$20.3 million and 157.4 positions. (See Appendix C for detailed workload matrixes.) OEHHA's current staffing is at critical mass, and cannot absorb further reductions.
- OEHHA recommends the realignment of its funding base to more closely reflect the risk management programs that implement OEHHA's risk assessments.

Of the six Cal/EPA BDOs, OEHHA is by far the most dependent on General Fund. In FY 01/02, the General Fund provided approximately 80 percent of OEHHA's support. In FY 03/04, OEHHA reduced its dependence on the General Fund to 67 percent of its budget, but this number is still too high. Other Cal/EPA boards and department derive a much more significant percentage of their budget from special funds. Because OEHHA's primary function is to provide critical scientific support to Cal/EPA programs, it makes little sense for OEHHA to have significantly different funding sources than its sister entities. Regulatory programs need to know their goals in reducing environmental contaminants to levels that are public health protective.

OEHHA has developed four options to diversify funding. Options 1, 2, and 3 propose the elimination of all General Fund support for OEHHA. Option 4 would retain some General Fund support while shifting the bulk of OEHHA's revenue sources to special funds. Because OEHHA provides scientific support to Cal/EPA's risk management programs, it is appropriate for OEHHA to receive revenues from the same special funds that support those risk management programs. However, it should be noted that utilizing most of the special funds without increasing the associated fees would negatively impact the other Cal/EPA boards and departments through potential program reductions.

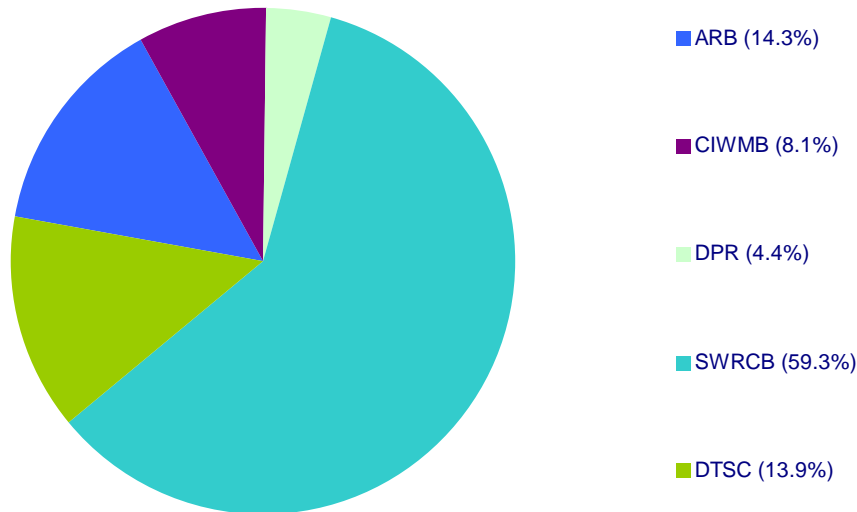
These four funding options are:

1. Direct funding from special funds that support Cal/EPA boards and departments based on their respective budgets. This option proposes that OEHHA receive 100 percent of its funding (at whatever level the Legislature determines in the annual budget act) via direct appropriations from special funds that also support the other Cal/EPA BDOs. The percentage of OEHHA support from each BDO would reflect that BDO's percentage of the total Cal/EPA budget. For example, the budgets of the SWRCB and nine regional water quality control boards comprise approximately 59 percent of Cal/EPA's total budget and, therefore, SWRCB-related fund(s) would fund 59 percent of OEHHA's budget.

If OEHHA were to receive its full recommended funding of \$20.3 million to meet its statutory mandates and other critical requirements, it would receive the following from

each BDO: SWRCB, \$12.0 million; ARB, \$2.9 million; DTSC, \$2.8 million; IWMB, \$1.6 million; and DPR, \$1.0 million.

## Office of Environmental Health Hazard Assessment OPTION #1



**Total Budget \$20,325K**

**Pros:** The mix of funding sources would reinforce OEHHHA's primary responsibility as the scientific advisor to the five other Cal/EPA boards and departments. OEHHHA's budget would reflect the environmental priorities of the Governor and the Legislature; the BDOs with the largest budgets would make the largest contributions to OEHHHA.

OEHHHA would not be dependent on any direct funding from the General Fund.

**Con:** There would be some inconsistency between OEHHHA's mix of funding sources and its expenditures by activity. For example, SWRCB would contribute significantly more to OEHHHA's budget than ARB, even though OEHHHA currently provides more direct support to ARB. Also, some of OEHHHA's mandates benefit all Californians (e.g. Proposition 65) which argues for some amount of General Fund.

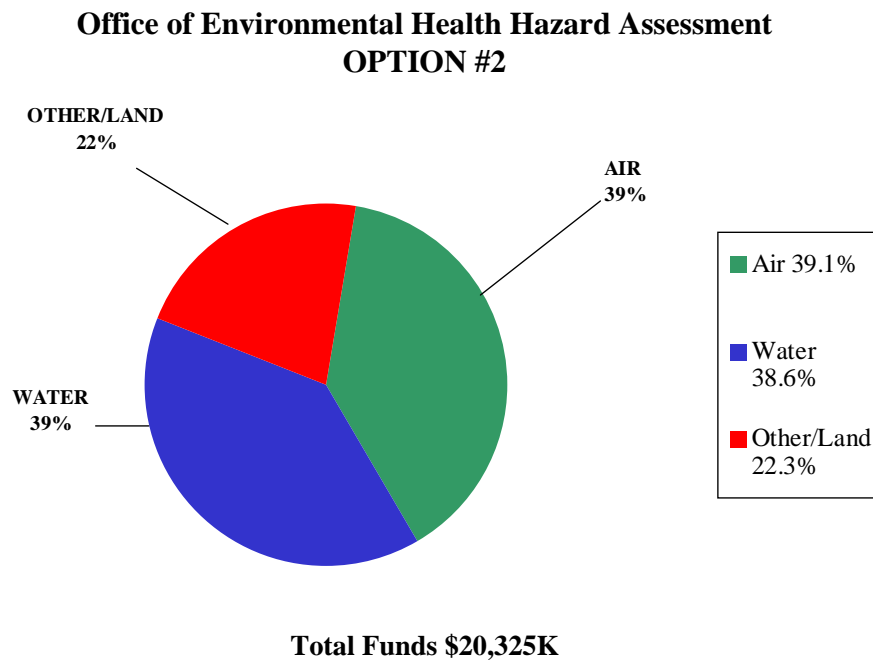
Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

2. Direct funding from special funds that support Cal/EPA boards and departments based on OEHHHA's expenditures in program/media (i.e., air, water, land and other) areas. This option also proposes that OEHHHA support would reflect the percentage of OEHHHA's expenditures relating to the media (air, water, land) that falls within a regulatory jurisdiction. For example, the percentage of OEHHHA revenues received from funds that

support ARB would reflect the percentage of OEHHA revenues relating to air contaminants.

Under a full-funding option of \$20.3 million, OEHHA would receive approximately \$7.7 million from ARB, \$7.5 million from SWRCB, and approximately \$5.1 million in total from DTSC, DPR, and IWMB.

One possible variation of this option would allow OEHHA to receive direct funding from state entities outside of Cal/EPA. For example, because DHS uses OEHHA's PHGs for drinking water, OEHHA would receive a certain level of direct funding from DHS.



**Pros:** The mix of OEHHA's funding sources would reflect its expenditures by activities. For example, approximately 39 percent of OEHHA's revenues would come from the air-quality arena, properly reflecting that air-quality activities comprise about 39 percent of OEHHA's workload.

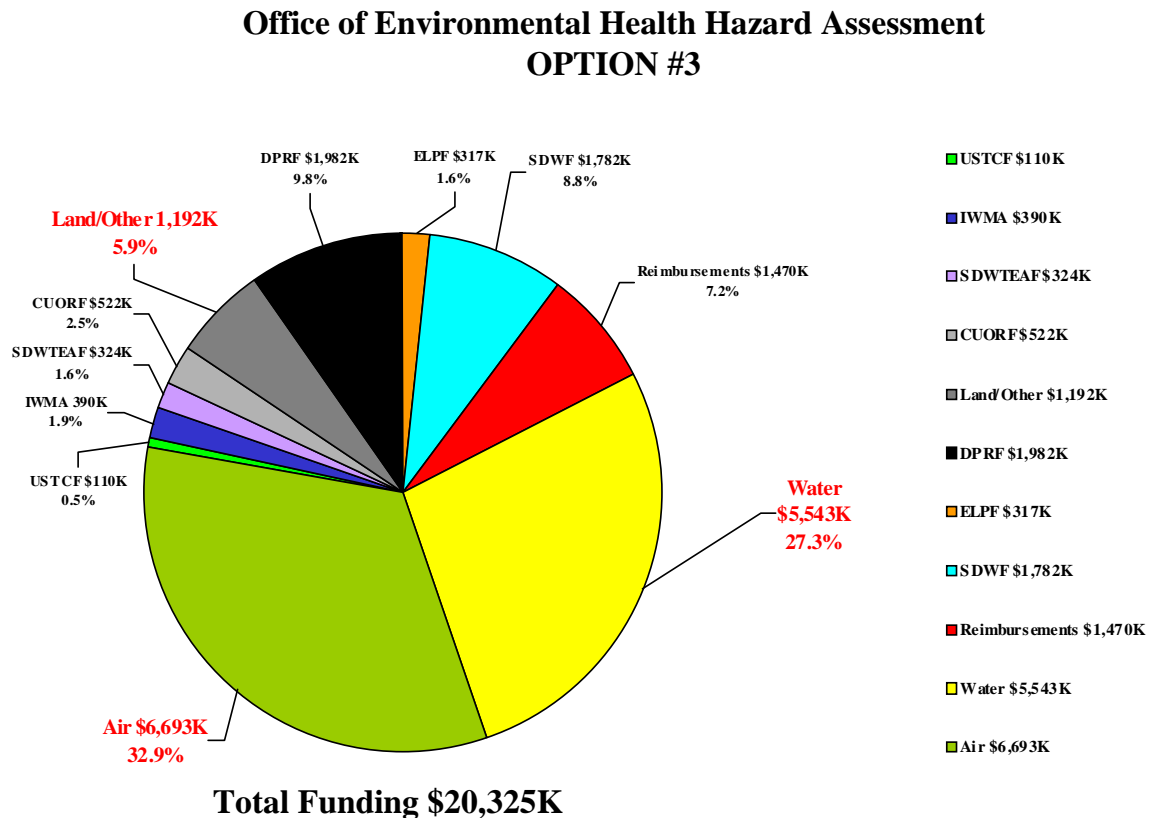
OEHHA would not be dependent on any direct funding from the General Fund.

**Cons:** While the nexus between OEHHA's expenditures by activity and the special fee appropriations might be clearer in many cases than in Option 1, OEHHA has program mandates where General Fund is appropriate.

Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

3. Mix of special fund appropriations from special funds that support Cal/EPA BDOs and other state departments. This option is essentially a refinement of Option 2, with OEHHA's existing special funds augmented in accordance with OEHHA's program costs by media (air, water, land).

Under this option, OEHHA would continue to receive funding from existing special funds. This would account for \$6.9 million, or 34 percent of a fully funded \$20.3 million budget. The remaining \$13.4 million, or 66 percent of the budget, would come in direct payments from the other Cal/EPA BDOs and other state departments as described in Scenario 2.



**Pros:** OEHHA would not be dependent on any direct revenues from the General Fund, and would therefore be protected from any volatility in the General Fund.

The diversity of funding sources would promote fiscal stability and minimize the consequences to OEHHA of a significant decline in available funding from any one source.

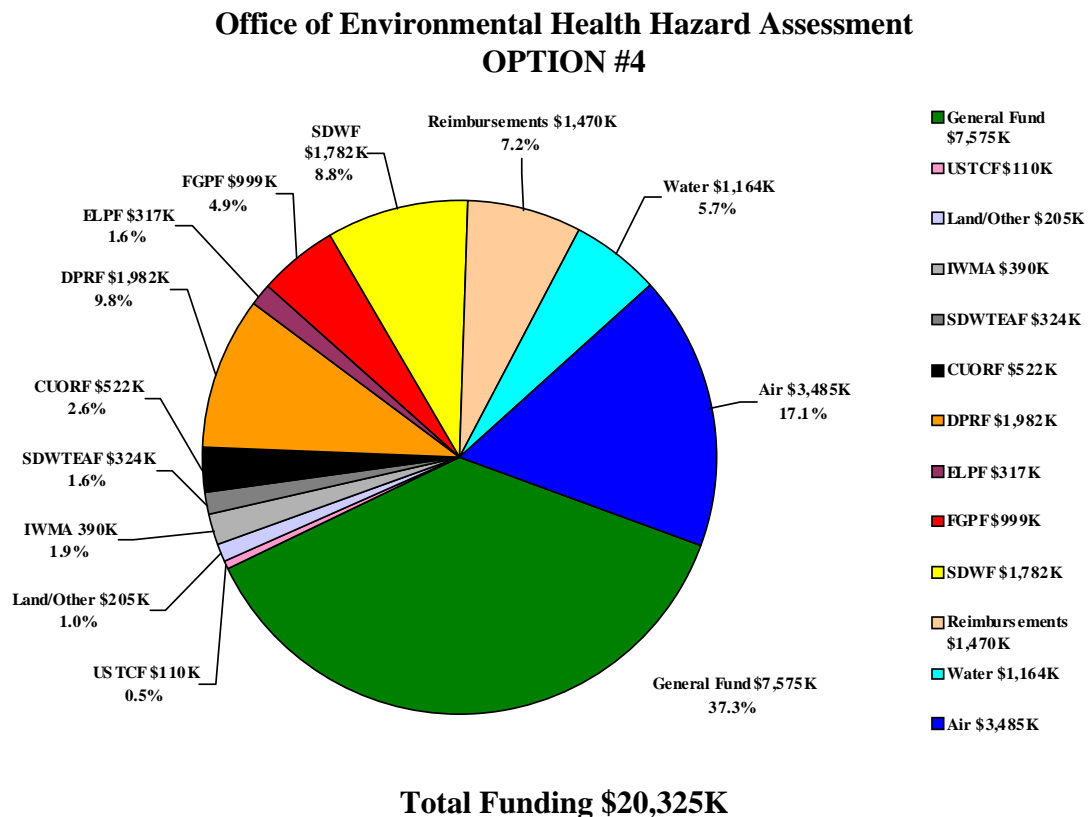
There would be a clearer nexus between OEHHA's expenditures and revenues from special funds, as OEHHA would maintain the mix of special fund sources in the current-year budget.

**Cons:** OEHHA's budget would be vulnerable to volatility in one or more special funds that provide OEHHA with its revenues.

OEHHA would be heavily dependent on special funds that can only finance a very specific range of activities. As a result, OEHHA's budget could be somewhat inflexible. For example, it might be difficult to shift funding from air-related activities to water-related activities if the need ever arose because air-program funds could not be used to finance water-related activities. Similarly, it might be difficult to obtain funding for general activities that lack a nexus with any special funding source, therefore making General Fund more appropriate.

Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

4. **Retain current special fund sources and add additional special fund sources while continuing to receive some General Fund.** This option proposes that OEHHA keep its current special fund sources, and replace a large portion of its General Fund with additional special fund appropriations from Cal/EPA BDOs, as well as other state departments. This option is similar to Option 3, except that OEHHA would continue to receive some revenues from the General Fund. OEHHA proposes that it receive \$7.6 million in General Fund, which would constitute 37 percent of the recommended \$20.3 million budget. The remainder of the budget would consist of special funds (\$6.4 million, 32 percent of budget), \$1.5 million reimbursements, (7 percent of budget), and appropriations from other state departments (\$4.8 million, 24 percent of budget).





**Pros:** This option offers the greatest diversity of funding sources of the four options, and would therefore provide OEHHA with the most fiscal stability. This option would minimize the consequences to OEHHA of a significant decline in available funding from any one source.

There is a nexus between OEHHA's mix of funding sources and expenditures by activity. General Fund could be directed to activities lacking a nexus with a special fund source.

This option also provides OEHHA with considerable budgetary flexibility. The General Fund could potentially finance a rapid increase in any OEHHA activity if such a need ever arose. Similarly, General Fund could be directed to activities lacking a strong nexus with a special funding source.

**Cons:** Over one-third of OEHHA's budget would remain vulnerable to volatile changes in the General Fund. A significant decline in available General Fund monies could adversely impact OEHHA.

Utilizing some of these special funds without increasing the fees which support those funds would negatively impact other Cal/EPA BDOs and other state departments' risk management activities through potential program reductions.

#### **Recommendation:**

OEHHA's preferred option is Option 4 because it would diversify funding sources and stabilize core programs. Under this option for a \$20.3 million total budget, OEHHA would directly receive at least \$12.8 million from special funds for specific activities relating to the objectives of those funds, as well as General Fund for general activities that are not directly tied to a special fund.

**Note: The total resources of \$20.3 million and 157.4 positions do not include a full complement of Distributed Administration or Program Administration. Therefore, to the extent resources are added to OEHHA's budget, there would also need to be a complementary level of administrative resources added as well.**

## PROGRAM EFFICIENCIES

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OEHHA makes the following recommendation to improve efficiencies in its operations:

- 1) *Initiate new processes.* OEHHA is implementing new, streamlined processes for prioritizing the evaluation of chemicals for two key programs. These processes will better ensure that OEHHA's limited resources are directed toward evaluation of the chemicals that pose the greatest concern for public health.

In December 2004, OEHHA announced a revised procedure for prioritizing the evaluation of candidate chemicals for placement on the Proposition 65 list of substances that cause cancer and reproductive toxicity. Under this new procedure, OEHHA will no longer select chemicals at random for further screening and evaluation. Instead, OEHHA will present candidate chemicals to the two Proposition 65 independent scientific panels, which will consider public comments prior to determining which chemicals should undergo full evaluation for possible listing. This new procedure will help ensure that Proposition 65 evaluations focus on chemicals that pose the greatest concerns to Californians because of their toxicity and the extent of human exposure to them.

OEHHA is also initiating an informal procedure for review of its PHGs for drinking water contaminants. State law requires OEHHA to review and, if appropriate, revise each PHG at least every five years. In some instances, a detailed review of a PHG is not necessary, because the chemical in question either is not found in California's publicly supplied drinking water, or there have been no new scientific developments concerning that chemical. In those cases, staff will forego an extended review of the chemical, allowing resources to be focused on chemicals that are more prevalent in drinking water or for which there is new scientific information.

## ACRONYMS

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APCF	Air Pollution Control Fund
ARB	Air Resources Board
ATCM	Airborne Toxic Control Measures
ATES	Air Toxicology and Epidemiology Section
ATIAA	Air Toxic Inventory and Assessment Account
BDO	Boards, Departments, and Office
Cal/EPA	California Environmental Protection Agency
CIAQWG	California Indoor Air Quality Working Group
CTRMF	California Tire Recycling Materials Fund
IWMB	Integrated Waste Management Board
DFG	Department of Fish and Game
DHS	Department of Health Services
DPR	Department of Pesticide Regulation
DPRF	Department of Pesticide Regulation Fund
DTSC	Department of Toxic Substances Control
ELPF	Environmental License Plate Fund
EPIC	Environmental Protection Indicators for California
FGPF	Fish and Game Preservation Fund
GF	General Fund
GRP-1	Governor's Reorganization Plan No. 1
HWCA	Hazardous Waste Control Account
IRAS	Integrated Risk Assessment Section
IWMA	Integrated Waste Management Account
LAO	Legislative Analyst Office
MVA	Motor Vehicle Account
NAS	National Academy of Sciences
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
PETS	Pesticide and Environmental Toxicology Section
PHG	Public Health Goal
RCHAS	Reproductive and Cancer Hazard Assessment
SDWA	Safe Drinking Water Account
SDWTEAF	Safe Drinking Water Toxic Enforcement Act Fund
SWQCF	State Water Quality Control Fund
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TSCA	Toxic Substances Control Account
UORF	Used Oil Recycling Fund
USTCF	Underground Storage Tank Cleanup Fund
WDPF	Waste Discharge Permit Fund